

1927. *Ormia tarsalis*; Séguy, Encycl. Ent., Ser. B, II, Dipt. 4:16.  
[French Guiana: female, in Paris Museum; full description, and in key to three spp.]

It is clear from the description that this species has a narrow front, its width equal to the length of the third antennal segment. This places it near *dominicana* and *guianica*, but it cannot be definitely identified at present.

### MARSHALLOTHYAS, A NEW GENUS BELONGING TO THE SUBFAMILY THYASINAE

(ACARINA, HYDRACARINA)<sup>1</sup>

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Collections made in certain springs and seepage areas in Michigan, Illinois, and Minnesota during the summers of 1950-52 have turned up specimens of an interesting new genus of *Thyasinae*. The genus is named in honor of Ruth Marshall for her outstanding contributions to the study of North American hydrachnids. The author wishes to thank Mr. Rodger Mitchell of the University of Michigan, Ann Arbor, for the opportunity to examine some of his specimens belonging to this genus.

#### Genus *Marshallothyas*, new genus

*Diagnosis*.—Lateral eyes in capsules, median eye without pigment; prefrontalia, postfrontalia and dorsocentralia 1 united into two elongated plates lying on each side of the median eye, occasionally these two plates fused for a short distance posterior to the median eye, fig. 6; postocularia usually located on the two enlarged frontal plates but occasionally lying free in the integument; all other dorsal plates as in *Thyas*; prefrontalia and postfrontalia fused in the nymph but dorsocentralia 1 and the postocularia are free, fig. 8; genital field of adult similar to that found in *Panisoides*.

*Genotype*.—*Marshallothyas asopos*, new species.

This new genus seems to be intermediate between *Thyas* Koch, 1836 and *Panisoides* Lundblad, 1926. *Marshallothyas* differs from *Thyas* in that the dorsocentralia 1 are fused to the pre- and postfrontalia and in usually having the postocularia lying on these frontal plates. The genital field resembles that found in *Panisoides*. However, in the latter genus the prefrontalia, postfrontalia, dorsocentralia 1 and the postocularia are united into a single frontal shield completely surrounding the median eye. *Marshallothyas* shows a tendency in this direction in that the two frontal plates occasionally may be

<sup>1</sup>Contribution from the University of Michigan Biological Station.

united for a short distance, fig. 6. In *Panisoides* dorsocentralia 5 and all of the dorsolateralia are greatly expanded. Since the nymph of *Panisoides* is unknown a comparison with the new genus is impossible. Nymphs of *Marshallothyas*, however, differ from those of *Thyas* in having the genital flaps reduced to small setae-bearing sclerites, fig. 7.

#### *Marshallothyas asopos*, new species

*Male*.—Length of body 0.87-1.43 mm.; length of frontal plates 0.26-0.31 mm.; length of genital field 0.25-0.31 mm.; length of capitulum 0.23-0.26 mm.; length of chelicerae 0.27-0.29 mm.

Body oval, integument papillated; the pigmentless median eye lying free in the integument; pre- and postfrontalia fused with dorsocentralia 1 on both sides of the median eye to form two elongated frontal plates which are widest near the middle, occasionally these plates are fused for a short distance in the region of greatest width, fig. 6; postocularia usually situated on a bulge on the outer side of the frontal plates (occasionally the postocularia may be free in the integument); all other dorsal plates of moderate size, with dorsolateralia 1-3 being the largest; genital field similar to that found in *Panisoides setipes* (Viets, 1911); genital flaps projecting slightly beyond the anterior genital acetabula, these flaps with four pairs of setae along the anterior margin, fig. 10; middle pair of genital acetabula nearer posterior pair; typically with three pairs of genital acetabula, however, there may be one or two smaller, supernumerary acetabula; inner margin of genital flaps with a row of setae beginning just posterior to the first acetabula and ending slightly anterior to the third pair; a lobed sclerite, bearing 13-17 setae, located mesad to the third pair, fig. 10; capitulum, chelicerae and palpi, figs. 4, 5, 9, typical of the Thyasinae in general; dorsal lengths of the palpal segments varied as follows: P-I, 0.050-0.059 mm.; P-II, 0.116-0.127 mm.; P-III, 0.049-0.058 mm.; P-IV, 0.168-0.188 mm.; P-V, 0.043-0.048 mm. Fig. 3 shows the chaetotaxy of the second leg.

*Female*.—Similar to the male except that it averages slightly larger, possesses a small pregenital sclerite in the median line just anterior to the first pair of genital acetabula, fig. 2, and has fewer and stouter setae (5-8) on the lobed sclerites located mesad to the third acetabula; these sclerites also smaller in female.

*Nymph*.—Resembles nymphs of the genus *Thyas* except that the pre- and postfrontalia are fused into a pair of plates on either side of the median eye; dorsocentralia 1 are triangular plates which are only slightly smaller than the frontal plates; provisional genital field with two pairs of acetabula; genital flaps reduced to setae-bearing sclerites, usually with two pairs of setae, fig. 7; one or two setae present just anterior to the first pair of acetabula.

*Types*.—Holotype, adult ♂, taken in a spring at the base of the Maple River Dam, Emmet Co., Michigan (T36N/R4W/S10), June 17, 1952; allotype, adult ♀, same date and locality

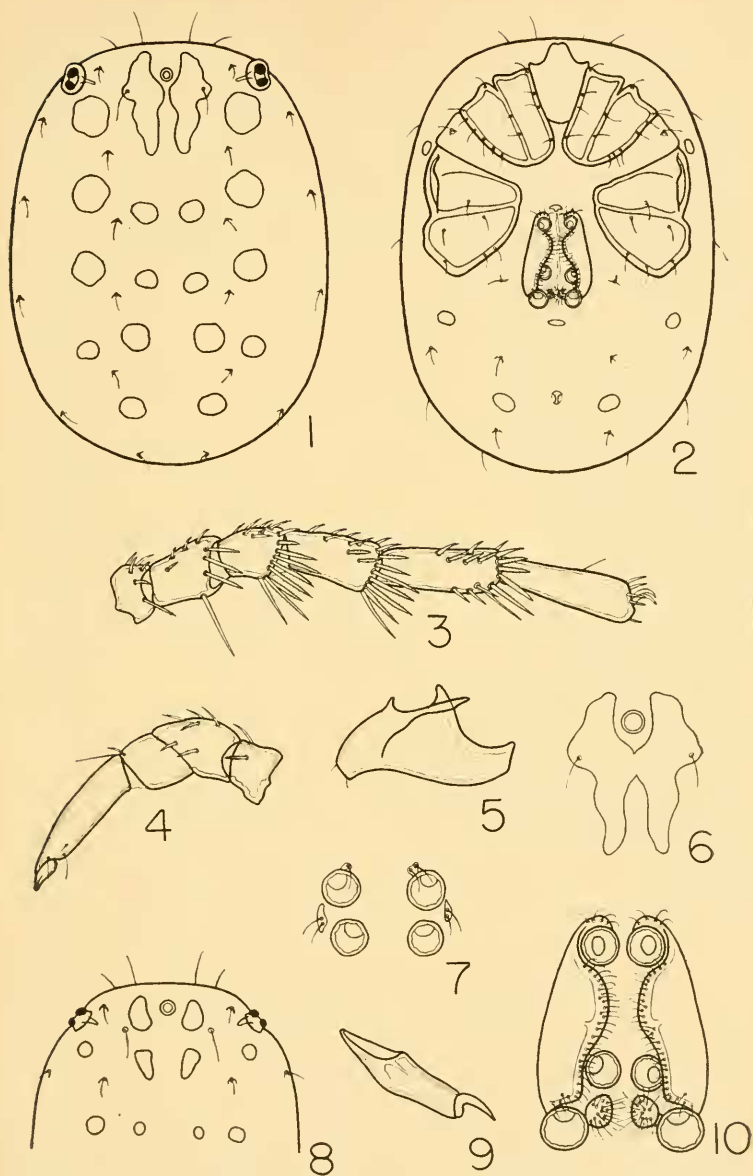


Fig. 1, dorsal view, male; fig. 2, ventral view, female; fig. 3, second leg, anterior view; fig. 4, left palp, outer view; fig. 5, capitulum, lateral view; fig. 6, ocular region of an individual in which the frontal plates are touching; fig. 7, provisional genital field, nymph; fig. 8, anterior dorsal view, nymph; fig. 9, chelicera; fig. 10, genital field, male.

as the holotype; paratypes, 11 ♂, 9 ♀, 2 nymphs, same locality, June 17-July 1, 1952; 1 ♂, collected in a cold spring in "The Gorge," Cheboygan Co., Michigan (T37N/R3W/S33), July 2, 1951. The holotype and allotype will be deposited in the Chicago Natural History Museum, paratypes will be placed in the United States National Museum. The author has several specimens which differ in certain details from the Emmet County population. Three ♀ collected in a cold seepage area (temperature, 10° C.) associated with Laughing Whitefish Falls, Alger Co., Michigan have the two frontal plates fused at a point farther behind the median eye than that shown in fig. 6. Two specimens taken in Beaver Creek, Houston Co., Minnesota, July 4, 1950 (R. Mitchell) differ in that there is a tendency for the postocularia to lie free in the integument. In one individual both postocularia were separate while in the other only one of the postocularia was fused with the frontal plates. All of these individuals are tentatively assigned to *M. asopos*, but are not included in the type series. One ♂ belonging to the genus *Marshallothyas*, but representing a second species, was taken from a seepage area in Illinois (R. Mitchell). Description of this species will be postponed until more specimens are available.

*Habitat*.—Found in cold springs and seepage areas.

*Range*.—*Marshallothyas asopos* has been collected in Michigan and Minnesota.

#### REFERENCES

- Koch, K. L., 1836. Deutschlands Crust., Myr., Arach., vol. 5.  
Lundblad, O., 1926. Neue Hydracarinae aus Schweden. VI. Neue Gattungen. Zur Systematik der Thyas-artigen Milben. Ent. Tidskr. 47:207-208.  
Viets, K., 1911. Zwei neue Hydracarinae aus dem Genus Thyas Koch. Zool. Anz. 38:332-333.

#### NEW SPECIES AND VARIETIES OF OPIUS

(HYMENOPTERA, BRACONIDAE)

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Some species of *Opius* are well-known parasites of the fruit infesting Tephritidae, but some of the latter infest flowerbuds and young shoots as well as fruits. The species described immediately below was reared by Mr. N. L. H. Krauss from a tephritid found in the flower heads of a Malayan plant, *Hyptis capitata*. Its procurement was incidental; the species itself has no connection with the fruitfly parasite introduction proj-